

Appl. No. 10/034,227
Amdt. dated March 15, 2005
Reply to Office action of December 15, 2004

REMARKS

I. CLAIM STATUS

Claims 1-64 were pending. Claims 2, 6, 19, 44, 48, 61 have been canceled. Claims 1, 3-4, 7, 10, 14, 23, 31, 35, 43, 45-46, 49, 52, and 56 have been amended. Claims 1, 3-5, 7-18, 20-43, 45-47, 49-60, and 62-64 are therefore pending.

Claim 1 has been amended to incorporate the limitations of canceled claim 6.

Claims 3-4, 10, 14, 23, 31, 35, 45-46, 52, and 56 have been amended to clarify the invention.

Claims 7, 14, 49, and 56 have been amended to alter their dependence from canceled claims.

Claim 43 has been amended to incorporate the limitations of canceled claim 48.

II. REJECTIONS UNDER 35 USC §§ 102, 103

Claims 1-10, 15-35, 37, 39-52 and 57-64 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Arimilli (U.S. Pat. No. 6,633,838). Claims 11-14, 36, 38 and 53-56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Arimilli. Claims 2, 6, 19 have been canceled. Insofar as these rejections apply to the remaining claims as amended, applicant traverses because the cited art fails to teach or suggest every element of the claims.

For example, independent claim 1 as amended recites a "word recognizer [that] includes a Boolean logic section ... [which] includes a plurality of software match logical units that detect a software event." To anticipate this claim limitation, the examiner cites the XNOR and OR units in Arimilli's Fig. 4. However, these units are operating on hardware-generated signals 400 ("data from a variety of VLSI logic circuits"), and thus are not detecting a software event. Arimilli's use of programmable match patterns does not alter this analysis. Thus, claim 1 and its dependent claims 3-5, 7-18, and 20-22 are allowable over the cited art.

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Independent claim 23 as amended recites "a counting device that is programmable by a user to count the number of times a match condition occurs by counting only once when a match condition exists for one or more consecutive clock cycles, and that is programmable by the user to count the number of clock cycles during which a match condition exists." Thus, the counter is programmable in two modes, one of which counts only once when a match condition exists for one or more consecutive cycles, and the other of which counts for the duration of a match condition. Applicant can find no such teaching or suggestion in Arimilli. Arimilli teaches a counter 670 (Fig. 6) which operates in only one counting mode, and appears to make no provision for a second mode. See Arimilli col. 7, lines 3-18. Thus claim 23 and its dependent claims 24-36 are allowable over the cited art.

Unamended Independent claim 37 recites "a word recognizer ... [that] includes: a Boolean logic section comprising ... one or more software match logical units which are capable of detecting a software event." Amended independent claim 43 recites a similar limitation. As noted previously with respect to independent claim 1, Arimilli fails to teach or suggest software match logical units. For at least this reason, independent claims 37 and 43, along with their respective dependent claims 38-42, and 45-47, 49-64 are allowable over the cited art.

Unamended dependent claim 8 recites "the output signals of the hardware match logical units and the software match logical units connect to both an AND term and an OR term, and the user selects on an individual basis whether the AND term or the OR term will be enabled for each of the logical units." Dependent claims 33, 40, and 50, recite a similar limitation. To anticipate this limitation, the examiner cites AND units 535-560 and OR unit 565 of Arimilli's Fig. 5. However, the cited portions of Arimilli are not alternative paths as required by the claim. Rather, the cited portions of Arimilli are coupled in sequence, with the AND units being used to gate triggers before they reach the OR unit. Thus Arimilli's units are enabled or disabled together, not in the alternative as required by the claim. For

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at least this additional reason, dependent claim 8 and its dependent claims are allowable over the cited art.

Unamended dependent claim 9 recites "wherein the logical units for which the AND term is selected have their output signals combined together in an AND gate." Dependent claims 34, 41, and 51, recite a similar limitation. To anticipate this limitation, the examiner cites AND units 535-560 and OR unit 565 of Arimilli's Fig. 5. However, the cited portions of Arimilli simply fail to teach or suggest the recited limitation – an OR gate is not an AND gate. For at least this additional reason, dependent claim 9 and its dependent claims are allowable over the cited art.

Dependent claim 22 recites "the on-chip memory [that stores internal state data in response to the issuance of the Match signal] comprises cache memory." Dependent claim 64 recites a similar limitation. The examiner cites array 140 of Arimilli's Fig. 1 as teaching this limitation. However, Arimilli nowhere teaches or suggests that the array 140 comprises cache memory or any other form of dual-use memory. For at least this additional reason, dependent claims 22 and 64 are allowable over the cited art.

Dependent claim 31 recites "the Boolean logic section further includes a plurality of software match logical units that detect a software event." As noted previously with respect to independent claim 1, Arimilli fails to teach or suggest software match logical units. For at least this additional reason, dependent claim 31 and its dependent claims are allowable over the cited art.

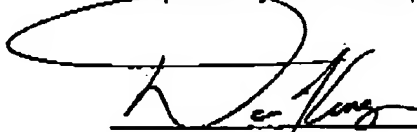
III. CONCLUSION

In the course of the foregoing discussions, Applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

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Applicant respectfully requests reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,



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